

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018347**Date Inspected:** 19-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Le Feng, Geng Wei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG/TOWER**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

Bay # 10, South Tower lift 5, Capping plate (NWIT # 7411)

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% and random Visual Testing (VT) and green tagging of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated MT report for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

SSD1-TL5-1B/F-070A/B, 048A/B, 066A/B, 044A/B, 061A/B, 058A/B, 078A/B, 050A/B, 072A/B, 042A/B, 075A/B, 063A/B, 059A/B (Green Tag No. # 13650)

Bay # 14, OBG Bottom Plate (NWIT # 7416)

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows.

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SEG3020A-005

This Quality Assurance (QA) Inspector observed the following work in progress:

BAY 10

OBG BIKE PATH, BOTTOM COVER PLATE

FCAW welding of weld joints 001~004 located on BK4ASD1-028.

Welder is identified as 053869. ZPMC QC is identified as Mr. Yu Zhi Lai.

The welding variables recorded by QC appeared to comply with WPS-B-T-2231-Tc-U4c-F.

FCAW welding of weld joints 022~024, 027 located on BK4ASD1-028.

Welder is identified as 040533. ZPMC QC is identified as Mr. Yu Zhi Lai.

The welding variables recorded by QC appeared to comply with WPS-B-T-2231-Tc-U4c-F.

FCAW welding of weld joint 002 located on BK004A8-025.

Welder is identified as 052075. ZPMC QC is identified as Mr. Yu Zhi Lai.

The welding variables recorded by QC appeared to comply with WPS-B-T-2232-Tc-P4-F.

FCAW welding of weld joint 007 located on BK004A8-025.

Welder is identified as 040302. ZPMC QC is identified as Mr. Yu Zhi Lai.

The welding variables recorded by QC appeared to comply with WPS-B-T-2232-Tc-P4-F.

BAY 14

FCAW welding of weld joint 066 located on SEG3007AL.

Welder is identified as 069866. ZPMC QC is identified as Mr. Zhong Yong Gang.

The welding variables recorded by QC appeared to comply with WPS-B-T-2332-Tc-P4-F.

FCAW welding of weld joint 038 located on SEG3007F (B-WR16847).

Welder is identified as 037705. ZPMC QC is identified as Mr. Zhong Yong Gang.

The welding variables recorded by QC appeared to comply with WPS-345-FCAW-2G(2F)-REPAIR-1.

FCAW welding of weld joint 091 located on SEG3091AB joining LD 3042 to Bottom plate (B-CWR2091, REV 0).

Welder is identified as 044824. ZPMC QC is identified as Mr. Wang Xu.

The welding variables recorded by QC appeared to comply with WPS-345-FCAW-2G(2F)-FCM-REPAIR.

During random in process inspection this QA inspector observed that ZPMC NDT personnel was performing Ultrasonic Testing (UT) on the weld joint SEG3019A-009 of lift 14E. The weld is Complete Joint Penetration (CJP) joining side plate to bottom plate. During inspection ZPMC NDT personnel observed 16 numbers of UT nonconforming indications. These indications are clearly marked on the weld joints.

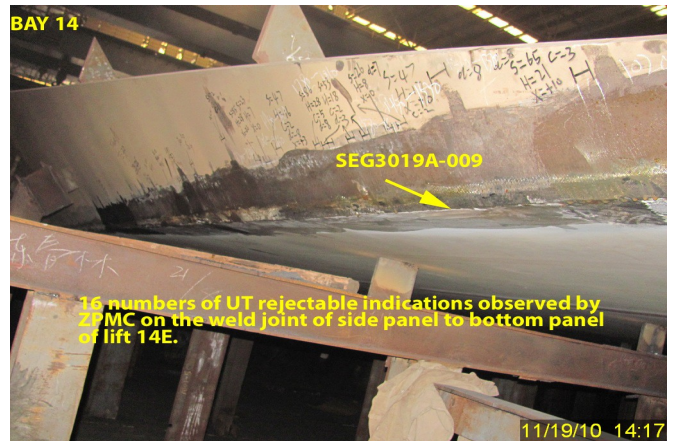
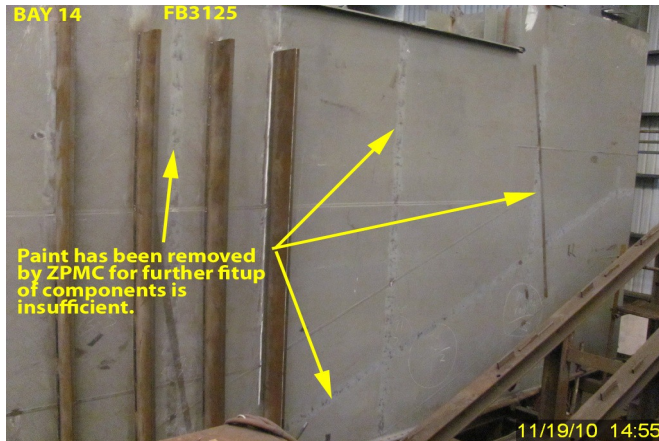
During random in process inspection this QA inspector observed that insufficient paint has been removed for the

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fit up of further components. Side panel of FL3 area connected to segment 13AE at panel point PP119 has been tack welded, but the paint removed on the tack welded area was observed to be insufficient. This issue has been discussed with lead QA and lead QA discussed this issue with ZPMC CWI Mr. Geng Wei. Mr. Geng Wei informed this QA that this issue would be corrected in a manner compliant with the contract documents. Attached photograph provides additional information.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang : 15000422372/ Thomas Ho - 150002048250, who represents the Office of Structural Materials for your project.

Inspected By: Gaikwad,Umesh

Quality Assurance Inspector

Reviewed By: Clifford,William

QA Reviewer